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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	09/847,113
Filing Date	May 01, 2001
First Named Inventor	TAO et al.
Group Art Unit	1762
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-69306-1/RFT/RMS/RMK

Sheet

1

of

15

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number	Kind Code ² (if known)			class	subclass
JS	1	4,704,193		Bowers et al.	11/1987		
	2	4,707,352		Stavrianopoulos	11/1987		
	3	4,707,440		Stavrianopoulos	11/1987		
	4	4,711,955		Ward et al.	12/1987		
	5	4,755,458		Rabbani et al.	7/1988		
	6	4,787,963		MacConnell	11/1988		
	7	4,840,893		Hill et al.	6/1989		
	8	4,849,513		Smith et al.	7/1989		
	9	4,868,103		Stavrianopoulos et al.	9/1989		
	10	4,894,325		Englehardt et al.	1/1990		
	11	4,882,013		Turner et al.	11/1989		
	12	4,943,523		Stavrianopoulos	7/1990		
	13	4,945,045		Forrest et al.	07/1990		
	14	4,952,685		Stavrianopoulos	8/1990		
	15	4,964,972		Sagiv et al.	10/1990		
	16	4,994,373		Stavrianopoulos	2/1991		

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		Office ³	Number ⁴	Kind Code ² (if known)			class	subclass	
JS	17	EP	0 234 938	A2	Cranfield Inst. of Tech.	2/1987			
	18	EP	0 229 943	B1	Molecular Biosystems Inc.	7/1987			
	19	EP	0 599 337	A2	Canon Kabushiki Kaisha	1/1994			
	20	EP	0 063 879	A2	Yale University	11/1982			
	21	EP	0 515 615		Boehringer Mannheim	9/1996			
	22	CA	2 090 904	A1	F. Hoffman-La Roche	9/1993			
	23	JP	238,166	A	Mitsubishi Corp.	1988	abstract		
	24	JP	6-41183	A2	Mitsubishi Corp.	1994			

Examiner Signature	Jeffrey Lin	Date Considered	1/18/03
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		Number	Kind Code ² (if known)				
JK	25	5,002,885		Stavrianopoulos	3/1991	1	1
	26	5,013,831		Stavrianopoulos	5/1991	1	1
	27	5,066,372		Weetall	11/1991	1	1
	28	5,082,830		Brakel et al.	1/1992	1	1
	29	5,089,112		Skotheim et al.	02/1992	1	1
	30	5,156,810		Ribi	10/1992	1	1
	31	5,175,269		Stavrianopoulos	12/1992	1	1
	32	5,180,968		Bruckenstein et al.	01/1993	1	1
	33	5,241,060		Englehardt et al.	8/1993	1	1
	34	5,242,828		Bergstrom et al.	09/1993	1	1
	35	5,278,043		Bannwarth et al.	1/1995	1	1
	36	5,312,527		Mikkelsen et al.	5/1994	1	1
	37	5,328,824		Ward et al.	7/1994	1	1
	38	5,356,786		Heller et al.	10/1994	1	1
	39	5,391,272		O'Daly et al.	02/1995	1	1
	40	5,403,451		Riviello et al.	4/1995	1	1
	41	5,436,161		Bergstrom et al.	07/1995	1	1
JK	42	5,443,701		Willner et al.	08/1995	1	1

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		Office ³	Number ⁴	Kind Code ² (if known)					
JK	43	WO	90/05732	A1	Columbia Univ.	5/1990	1	1	
	44	WO	92/10757	A1	Boehringer Mannheim	6/1992	1	1	
	45	WO	93/10267	A1	IGEN, Inc.	5/1993	1	1	
	46	WO	94/22889	A1	Cis Bio International	10/1994	1	1	
	47	WO	95/15971	A2	Calif. Inst. of Technology	6/1995	1	1	
JK	48	WO	96/40712	A1	Calif. Inst. of Technology	12/1996	1	1	

Examiner Signature	<i>Jeffrey Lee</i>	Date Considered	1/18/03
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Application Number 09/847,113

Filing Date May 01, 2001

First Named Inventor TAO et al.

Group Art Unit 1762

Examiner Name Not Yet Assigned

Attorney Docket Number A-69306-1/RFT/RMS/RMK

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		Number	Kind Code ² (if known)				
JS	49	5,705,346		Okamoto et al.	01/1998	disclosure	
	50	5,705,348		Meade et al.	1/1998		
	51	5,741,700		Ershov et al.	4/1998		
	52	5,756,050		Ershov et al.	5/1998		
	53	5,770,369		Meade et al.	6/1998		
	54	5,770,721		Ershov et al.	6/1998		
	55	5,776,672		Hashimoto et al.	7/1998		
	56	5,780,234		Meade et al.	7/1998		
	57	5,601,982		Sargent et al.	2/1997		
	58	5,620,850		Bamdad et al.	4/1997		
JS	59	5,622,821		Selvin et al.	04/1997		
	60	5,650,061		Kuhr et al.	07/1997		

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		Office ³	Number ⁴	Kind Code ² (if known)					
JS	61	WO	97/01646	A2	Univ. of N. Carolina	1/1997			
	62	WO	97/44651	A1	AU Membrane and	11/1997			
	63	WO	97/27329	A1	Univ. of Chicago	7/1997			
	64	WO	98/20162	A2	Clinical Micro Systems	5/1998			
	65	WO	98/27229	A1	Univ. of Chicago	6/1998			
	66	WO	98/28444	A2	Univ. of Chicago	7/1998			
	67	WO	98/35232	A2	Univ. of N. Carolina	8/1998			
	68	WO	98/57159	A1	Clinical Micro Systems	6/1997			
	69	WO	99/67425	A2	Clinical Micro Systems	12/1999			
	70	WO	99/14596	A1	AB Sangtec Medical	3/1999			

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Jeffrey Lee

Date Considered

1/18/03

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First Named Inventor	TAO et al.
Group Art Unit	1762
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Attorney Docket Number	A-69306-1/RFT/RM8/RMK

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number	Kind Code ² (if known)				
JS	71	5,824,473		Meade et al.	10/1998	-	-
	72	5,851,772		Mirzabekov et al.	12/1998	-	-
	73	5,952,172		Meade et al.	9/1999	-	-
	74	5,976,802		Ansorge et al.	11/1999	-	-
	75	6,090,933		Kayyem et al.	07/2000	-	-
	76	6,153,737		Manoharan et al.	11/2000	-	-
	77	6,180,352		Meade et al.	01/2001	-	-
	78	6,238,870		Meade et al.	05/2001	-	-
	79	6,200,761		Meade et al.	03/2001	-	-
	80	6,096,273		Kayyem et al.	08/2000	-	-
	81	6,107,080		Lennox et al.	08/2000	-	-
	82	5,795,453		Gilmartin	08/1998	-	-
	83	6,060,023		Maracas	05/2000	-	-
	84	6,060,327		Keen	05/2000	-	-
	85	6,071,699		Meade et al.	06/2000	-	-
	86	6,087,100		Meade et al.	07/2000	-	-

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		Office ³	Number ⁴	Kind Code ² (if known)					
JS	87	WO	97/41425	~	~		-	-	
	88	WO	99/37819	A2	Clinical Micro Systems	07/1999	-	-	
	89	WO	86/05815		-	03/1985	-	-	
	90	WO	93/22678		-	11/1993	-	-	
	91	WO	97/31256		-	08/1997	-	-	
	92	WO	98/51823		-	11/1998	-	-	
	93	WO	99/57319		-	11/1999	-	-	
	94	WO	99/29711		-	06/1999	-	-	
Examiner Signature		Jeffrey Kim				Date Considered	1/18/03		

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JS	95	6,177,250		Meade et al.	01/2001		
	96	6,096,825		Garnier	08/2000		
	97	6,197,515		Bamdad et al.	03/2001		
	98	6,203,758	B1	Marks et al.	03/2001		
	99	6,207,369	B1	Wohlstadter et al.	03/2001		
	100	6,221,583		Kayyem et al.	04/2001		
	101	6,232,062		Kayyem et al.	05/2001		
	102	6,258,545		Meade et al.	07/2001		
	103	6,268,149		Meade et al.	07/2001		
	104	6,268,150		Meade et al.	07/2001		
JS	105	6,277,576		Meade et al.	08/2001		
	106	6,300,141	B1	Segal	10/2001		
	107	6,306,584		Bamdad et al.	10/2001		
	108	6,322,979		Bamdad et al.	11/2001		
	109	20010034033	A1	Meade et al.	10/2001		
	110	20010046679	A1	Meade et al.	11/2001		

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		Office ³	Number ⁴	Kind Code ² (if known)					
JS	111	EP	0668502	B1	Yissum Research	05/2002			
	112	WO	90/05303	A1	Pharmacia AB	05/1990			
	113	WO	97/46568	A1	California Institute of Technology	12/1997			
JS	114	WO	98/04740		North Western Univ.	02/1998			
	115	WO	98/12539	A1	Meso Scale Tech.	03/1998			

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Jeffrey Law

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		Number	Kind Code ² (if known)			des	sch
JS	116	5,552,270		Khrapko et al.	9/1996	1	1
	117	5,565,552		Magda et al.	10/1996	1	1
	118	5,573,906		Bannwarth et al.	11/1996	1	1
	119	5,591,578		Meade et al.	1/1997	1	1
	120	5,595,908		Fawcett et al.	1/1997	1	1
	121	5,449,767		Ward et al.	9/1995	1	1
	122	5,472,881		Beebe et al.	12/1995	1	1
	123	5,476,928		Ward et al.	12/1995	1	1
	124	5,491,097		Ribi et al.	02/1996	1	1
	125	5,571,568		Ribi et al.	11/1996	1	1
	126	5,632,957		Heller et al.	05/1997	1	1
	127	5,700,667		Marble et al.	12/1997	1	1
JS	128	5,837,859		Teoule et al.	11/1998	1	1
	129	5,849,486		Heller et al.	12/1998	1	1

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JS	130	WO	98/31839	A2	Harvard College	07/1998	1	
	131	WO	98/57158		Clinical Micro Sensors	12/1998	1	
	132	WO	99/57317		Clinical Micro Sensors	05/1998	1	

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Sheet 7 of 15

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JS	133	Aizawa et al., "Integrated Molecular Systems for Biosensors," Sensors and Actuators B, B@S (Nos 1/3) Part 1:1-5 (March 1995).	
	134	Albers et al., "Design of Novel Molecular Wires for Realizing Long-Distance Electron Transfer," Biochemistry and Bioenergetics, 42:25-33 (1997).	
	135	Alleman, K.S., et al., "Electrochemical Rectification at a Monolayer-Modified Electrode," <i>J. Phys. Chem.</i> , 100:17050-17058 (1996).	
	136	Arkin et al. "Evidence for Photoelectron Transfer Through DNA Intercalation," <i>J. Inorganic Biochem. Abstracts</i> , 6th International Conference on Bioinorganic Chemistry, 51(1) & (2):526 (1993).	
	137	Barisci et al., "Conducting Polymer Sensors," <i>TRIP</i> , 4(9):307-311 (1996).	
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First Named Inventor

TAO et al.

Group Art Unit

1762

Examiner Name

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JS	150	Chang, I-Jy, et al., "High-Driving-Force Electron Transfer in Metalloproteins: Intramolecular Oxidation of Ferrocycytochrome c by Ru(2,2'-bpy) ₂ (im)(His-33) ³⁺ ," <i>J. Am. Chem. Soc.</i> , 113:7056-7057 (1991).	
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Group Art Unit	1762
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J	200	Lenhard, J.R., et al., "Part VII Covalent Bonding of a Reversible- Electrode Reactant to Pt Electrodes Using an organosilane Reagent" <i>J. Electronal. Chem.</i> , 78:195-201 (1977).	
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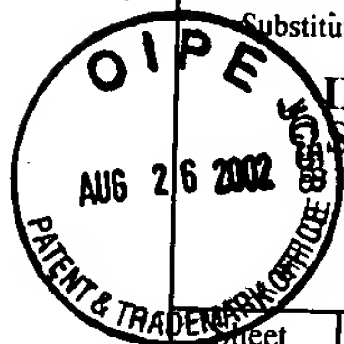
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JS	216	Mucic et al., "DNA-Directed Synthesis of Binary Nanoparticle Network Materials," <i>J. Am. Chem. Soc.</i> , 120:12674-12675 (1998).	
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Application Number	09/847,113
Filing Date	May 01, 2001
First Named Inventor	TAO et al.
Group Art Unit	1762
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-69306-1/RFT/RMS/RMK

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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J	232	Schumm, et al., "Iterative Divergent/Convergent Approach to Linear Conjugated Oligomers by Successive Doubling of the Molecular Length: A Rapid Route to a 128 Å-Long Potential Molecular Wire," <i>Angew. Chem. Int. Ed. Engl.</i> , 33(11):1360-1363 (1994).	
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JS	247	Turro, N., et al. "Photoelectron Transfer Between Molecules Adsorbed in Restricted Spaces," <i>Photochem. Convers. Storage Sol. Energy, Proc. Int. Conf.</i> , 8th, pp 121-139 (1990).	
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